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REMARKS

In the Office Action dated May 15, 2006, claims 1-3, 9, 10 and 17 were rejected under U.S.C. §102(e) as allegedly being anticipated by U.S. Patent No. 6,275,259 ("Gowda et al."). Furthermore, claims 4-8, 11-16 and 18-21 were rejected under U.S.C. §103(a) as allegedly being unpatentable over Gowda et al., or over Gowda et al. in view of U.S. Patent No. 6,587,144 ("Kim") or U.S. Patent No. 6,654,054 ("Embler").

In response, Applicant has amended the independent claims 1, 9 and 17 to more clearly distinguish the claimed invention from the cited references. Applicant has also amended the dependent claims 4, 5, 13 and 19 to more clearly distinguish the claimed invention from the cited reference. As amended, the independent claims 1, 9 and 17 are not anticipated by Gowda et al., as explained below. Thus, Applicant respectfully requests that the amended independent claims 1, 9 and 17, as well as the dependent claims 2-8, 11-16 and 18-21, be allowed.

A. Patentability of Amended Independent Claims 1, 9 and 17

The Office Action has rejected the independent claims 1, 9 and 17 under U.S.C. §102(e) as allegedly being anticipated by Gowda et al. In response, Applicant has amended claims 1, 9 and 17. As amended, the independent claim 1 recites:

"A method of correcting erroneous image signals comprising:  
providing a high signal and a low signal based on an image signal of a previously processed pixel, **said image signal of said previously processed pixel being an image signal from a set of image signals that represents a single captured image of a scene of interest**, said high signal and said low signal defining a signal range about said image signal of said previously processed pixel; and  
digitizing an analog signal of a current pixel using said high and low signals as references to derive a digitized signal of said current pixel within said signal range, including limiting said analog signal of said current pixel by said high and low signals, **said analog signal of said current pixel being another image signal from said set of image signals.**" (emphasis added)

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir.

1987); MPEP §2131. The cited reference of Gowda et al. discloses an automatic gain control circuit, which uses Vmax and Vmin values derived using output values of a previous frame to convert analog electrical signal outputs of the current frame to corresponding digital values, as illustrated in Fig. 1 and described in column 2, lines 30-67, and column 3, lines 1-20. Thus, the automatic gain control circuit of Gowda et al. operates at a frame level, not at a pixel level. Consequently, the cited reference of Gowda et al. does not disclose the claim elements of *“providing a high signal and a low signal based on an image signal of a previously processed pixel”* and *“digitizing an analog signal of a current pixel using said high and low signals as references to derive a digitized signal of said current pixel within said signal range”* in which the image signal of the previously processed pixel and the analog signal of the current pixel are from the same *“set of image signals that represents a single captured image of a scene of interest,”* as recited in the amended independent claim 1. Thus, the cited reference of Gowda et al. does not disclose each element of the amended independent claim 1. As such, Applicant respectfully asserts that the amended independent claim 1 is not anticipated by Gowda et al., and requests that the amended claim 1 be allowed.

The above remarks are also applicable to the amended independent claims 9 and 17, which include similar limitations. As such, Applicant respectfully asserts that the amended independent claims 9 and 17 are also not anticipated by Gowda et al., and requests that these amended claims 9 and 17 be allowed as well.

**B. Patentability of Dependent Claim 2-8, 11-16 and 18-21**

Each of the dependent claims 2-8, 11-16 and 18-21 depends on one of the amended independent claims 1, 9 and 17. As such, these dependent claims include all the limitations of their respective base claims. Therefore, Applicant submits that these dependent claims are allowable for at least the same reasons as their respective base claims.

As an example, the dependent claim 2 recites the limitation of *“converting said image signal of said previously processed pixel to said high signal and said low signal.”* The Office Action alleges that the cited reference of Gowda et al. teaches

this limitation. The cited reference of Gowda et al. discloses a MIN/MAX detector 106, which determines the minimum and maximum values for each frame of an image, as described in column 2, lines 49-51. The minimum and maximum values are then used to produce the Vmax and Vmin values, as described in column 2, lines 63-67, and column 3, lines 1-20, of Gowda et al. Thus, the cited reference of Gowda et al. does not disclose converting a single image signal of a previously processed pixel to BOTH the high and low signals, which are used to digitize an analog signal of a current pixel. Consequently, the cited reference of Gowda et al. does not disclose *"converting said image signal of said previously processed pixel to said high signal and said low signal,"* as recited in claim 2. Therefore, the dependent claim 2 is not anticipated by the cited reference of Gowda et al.

As another example, the amended dependent claim 4 now recites the limitations of *"comparing said analog signal of said current pixel with an analog signal of another previously processed pixel, said analog signal of said another previously processed pixel being another image signal from said set of image signals."* The Office Action alleges that the cited reference of Kim teaches *"comparing (figure 1, element 42) a present black level signal (read as current pixel signal value) and a preset black reference value (read as previously processed pixel value)."* The Office Action further alleges that it would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Gowda et al. and Kim to derive the claimed invention. However, the claimed *"analog signal of another previously processed pixel"* is recited as *"being another image signal from said set of image signals."* Thus, the analog signal of another previously process pixel and the analog signal of the current pixel, as recited in claim 4, are from the same *"set of image signals that represents a single captured image of a scene of interest,"* as recited in the amended independent claim 1. The present black level signal and the preset black reference value, as described in the cited reference of Kim, are NOT from the same set of image signals that represents a single captured image of a scene of interest. Thus, the amended dependent claim 4 cannot be obvious over Gowda et al. in view of Kim.

Applicant respectfully requests reconsideration of the claims in view of the claim amendments and the remarks made herein. A notice of allowance is earnestly solicited.

Respectfully submitted,

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